

09/16902/

# ABSTRACT

A fiber optic or optical waveguide illumination system includes a source coupling system. The source coupling system includes an optical channel with an internal cavity. A <sup>light</sup> ~~light~~ source is disposed inside the driving circuit. Coupling losses are minimized by placing the light source within the optical channel. The source cavity and the source optical channel can be shaped to enhance the amount of light captured in the channel by total internal reflection. Multiple light distribution waveguides can be connected to <sup>the</sup> ~~source~~ coupling channel to produce an illumination system.

09169021-10899